## RWRA FIVE-YEAR CAPITAL PLAN PROJECTS

Project	Construction	Project	# Customers	Cedar I	ills Friendly Par	k					Comments
Number	Year	i roject	/ERUs			n Assessment S	ystem Dev.	Capacity	Environmental	Op & Repl	Commente
ISCAL Y	EAR 2018-19										
М	2018-19	Various Sewer Relinings & Manhole Rehabs	N/A						\$1,080,000	\$360,000	Replacement project/ I & I Improvement
М	2018-19	Tunnel Sewer Manhole Rehabs	N/A				İ		\$360,000	\$120,000	Replacement project/ I & I Improvement
66	2018-19	Cedar Hills Sewer Extension (Construction/easement/admin fees)	125	X \$325,8	50		\$96,150				Potential Funding (KIA)
)P02	2018-19	Rehab Max Rhoads Plant Drying Beds	N/A							\$615,000	Resurface and new trough/grating/channeling system
)P04	2018-19	Max Rhoads Plant Clarifier #2 Center Pier Rehab	N/A							\$55,000	Center Column Bearings/Race/Paint
P05	2018-19	Max Rhoads Plant Clarifier #2 Trough Epoxy	N/A							\$65,000	Epoxy Coat Trough for Algae Control
P06	2018-19	Max Rhoads East Access Road	N/A							\$340,000	Sean estimate on separate access drive for brickyard. 100% RWRA financed
P08	2018-19	Grimes Standby Generator	N/A							\$100,000	Purchase/Install a standby generator to provide power to JMO facility
psub	2018-19	Plant Equipment Upgrades/Replacements	N/A								Includes forecasted existing plant/facility equipment replacements - See Coded Ops 5yr Plan
psub	2018-19	Collection System Facilities & Equipment Upgrades/Replacements	N/A							\$1,800,500	Includes forecasted collection system, all pump repair/replacement, fleet and PS replacements
OP		Plant and Collection System Renovations/Replacements	N/A							\$2,150,500	Various operation/replacement expenses
С		Environmental Improvement Initiative(s)	N/A						\$350,000		CSO initiative
	2018-19	Total New Customers	125	\$325	850 \$	0 \$0	\$96,150	\$0	\$1,790,000	\$3,805,500	2018-19 Total \$6,017,501
CAL Y	EAR 2019-20										
M	2019-20	Combined Sewer Tunnel Relining Project	N/A						\$2,850,000	\$950,000	CSO Initiative
36	2019-20	Thruston-Dermont Ph 3 (Springlane Area)	26	X		\$340,000	\$85,000				Potential grant eligibility
C7	2019-20	Lafayette Drive Pump Station and Force Main Diversion	N/A						\$200,000		CSO initiative
М	2019-20	Manhole Rehabilitations	N/A						\$450,000	\$150,000	Replacement project/ I & I Improvement
M	2019-20	Pipeline Rehabilitations	N/A						\$1,050,000	\$350,000	Replacement project/ I & I Improvement
122	2019-20	Max Rhoads Plant Sludge Process Improvements	N/A							\$1,550,246	Replace (2) MRP Belt Filter Presses with New Press Tech/Equipment
P03	2019-20	Collection and Plant Odor Control System	N/A							\$225,000	System wide Odor Control D/B Implementation post SW Master implementation
P28	2019-20	Max Rhoads Plant Hydraulics/ Profile Mods	N/A					\$250,000			Structural Modifications to correct hydraulic profile/capacity issues at MRP
P07	2019-20	Max Rhoads Plant PLC Upgrades - Ethernet Based	N/A							\$750,000	Modernize and upgrade RWRA PLC's to an Ethernet Based System
P10	2019-20	Max Rhoads Plant Clarifier #1 Center Pier Rehab	N/A							\$55,000	Center Column Bearings/Race/Paint
P11	2019-20	Max Rhoads Plant Clarifier #1 Trough Epoxy	N/A							\$65,000	Epoxy Coat Trough for Algae Control
P12	2019-20	David Hawes Plant Wasting Process Telemetry & Controls	N/A							\$80,000	Add SCADA Integrated TSS, DO, Blanket and COD Process Monitoring
P13	2019-20	David Hawes Plant N. Clarifier Center Pier Rehab	N/A							\$55,000	Rehab Metal Surfaces, Paint Weir Troughs
P14	2019-20	David Hawes Plant N. Clarifier Trough Epoxy	N/A							\$65,000	Epoxy Coat Trough for Algae Control
P16	2019-20	David Hawes Plant Generator Replacement	N/A							\$350,000	Replace DHP Standby Generator to support WWTP & Admin (Master Plan Considerations)
osub	2019-20	Plant Equipment Upgrades/Replacements	N/A							\$65,000	Includes forecasted existing plant/facility equipment replacements - See Coded Ops 5yr Plan
psub	2019-20	Collection System Facilities & Equipment Upgrades/Replacements	N/A							\$1,748,000	Includes forecasted collection sys, all pump repair/replacement, fleet and PS replacements
OP	2019-20	Plant and Collection System Renovations/Replacements	N/A								Various operation/replacement expenses
С	2019-20	Environmental Improvement Initiative(s)	N/A						\$350,000		CSO initiative
	2019-20	Total New Customers	26		\$0 \$	0 \$340,000	\$85,000	\$250,000	\$4,900,000	\$6,458,246	2019-20 Total \$12,033,246
CAL Y	EAR 2020-21										
12		Baybrook Interceptor/Separation Project	N/A			T			\$300,000		CSO initiative
213		Parkway Drive Interceptor Project	N/A	1					\$3,500,000		CSO initiative
M21		Ragu Pump Station Upgrades	N/A	1				\$950,000	. , , ,		TIF, Replacement/Rehabilitation Project - Capacity Improvement
М		Manhole Rehabilitations	N/A	1					\$450,000		Replacement project/ I & I Improvement
M		Pipeline Rehabilitations	N/A				1		\$975,000		Replacement project/ I & I Improvement
P15		Additional Camera/Grout Truck	N/A	1			İ				Add Camera/Grout truck for additional CIPP/Grouting Capability - Staffing Considerations
P17		Energy Efficiency Upgrades	N/A				1			. ,	Replace lighting with LEDs (Shop, Barn, Offices)
P19		David Hawes Plant S. Clarifier Center Pier Rehab	N/A	1							Rehab Metal Surfaces, Paint Weir Troughs
P20		David Hawes Plant S. Clarifier Trough Epoxy	N/A	<del>                                     </del>		1				. ,	Epoxy Coat Trough for Algae Control
)P21		Maintenance Facility Renovations	N/A				1				Move Maintenance Department over to DHP
psub	2020-21	Plant Equipment Upgrades/Replacements	N/A	1							Includes forecasted existing plant/facility equipment replacements - See Coded Ops 5yr Plan
psub		Collection System Facilities & Equipment Upgrades/Replacements	N/A				1				Includes forecasted collection sys, all pump repair/replacement, fleet and PS replacements
OP	2020-21	Plant and Collection System Renovations/Replacements	N/A								Various operation/replacement expenses
С		Environmental Improvement Initiative(s)	N/A						\$350,000		CSO initiative
	2020-21	Total New Customers			\$0 \$	0 \$0	ćΩ	\$950,000	\$5,575,000		

## RWRA FIVE-YEAR CAPITAL PLAN PROJECTS

Project	Construction	Project	# Customers	<b>I</b>	Friendly Park		0t D	0	F	O., 0 D.,l	Comments
Number	Year		/ERUs	Construction	Construction	Assessment	System Dev.	Capacity	Environmental	Ор & кері	
ISCAL YE	EAR 2021-22										
М	2021-22	Manhole Rehabilitations	N/A						\$450,000	\$150,000	Replacement project/ I & I Improvement
М	2021-22	Pipeline Rehabilitations	N/A						\$450,000	\$150,000	Replacement project/ I & I Improvement
OP22	2021-22	PZEV Infrastructure	N/A								\$30,000 Charging Station @ Each Facility
OP23	2021-22	Max Rhoads Plant Clarifier #3 Trough Epoxy	N/A							\$150,000	Rehab Metal Surfaces, Paint Weir Troughs
OP24	2021-22	David Hawes Plant Ditch Aeration Upgrades	N/A							\$2,000,000	Upgrade/Replace Ditch Aerators (Fine Bubble Diffusers?)
C8	2021-22	Harsh Ditch Separation Project (Tampa Drive Area)	N/A						\$200,000		CSO Initiative
Opsub	2021-22	Plant Equipment Upgrades/Replacements	N/A								Includes forecasted existing plant/facility equipment replacements - See Coded Ops 5yr Plan
Opsub	2021-22	Collection System Facilities & Equipment Upgrades/Replacements	N/A							\$1,477,000	Includes forecasted collection sys, all pump repair/replacement, fleet and PS replacements
OP	2021-22	Plant and Collection System Renovations/Replacements	N/A								Various operation/replacement expenses
С	2021-22	Environmental Improvement Initiative(s)	N/A						\$350,000		CSO initiative
	2021-22	Total New Customers	0	\$0	\$0	\$0	\$0	\$0	\$1,450,000	\$4,072,000	2021-22 Total \$5,522,000
ISCAL YE	EAR 2022-23										
М	2022-23	Manhole Rehabilitations	N/A						\$450,000	\$150,000	Replacement project/ I & I Improvement
М	2022-23	Pipeline Rehabilitations	N/A						\$450,000		Replacement project/ I & I Improvement
OP09	2022-23	Grimes Fuel Station (12,000 Gallons)	N/A								Above ground Diesel Distribution Tank/Center at Grimes Yard (12,000 gal)
OP25	2022-23	David Hawes Plant Sludge Process Improvements	N/A							. ,	Mimic equipment upgrades from MRP. Additional installation cost @ 2nd Floor
OP27	2022-23	Max Rhoads Plant Process Control Automation	N/A								In channel COD, TSS, and Automated Wasting Control Logic
28	2022-23	Wimsatt Court Sewer Extension		Х		\$70,000					Potential grant eligibility
Opsub	2022-23	Plant Equipment Upgrades/Replacements	N/A	^		ψ. ο,σσσ					Includes forecasted existing plant/facility equipment replacements - See Coded Ops 5yr Plan
Opsub	2022-23	Collection System Facilities & Equipment Upgrades/Replacements	N/A								Includes forecasted collection sys, all pump repair/replacement, fleet and PS replacements
OP	2022-23	Plant and Collection System Renovations/Replacements	N/A								Various operation/replacement expenses
C	2022-23	Environmental Improvement Initiative(s)	N/A						\$350.000		CSO initiative
	2022-23	Total New Customers	8	\$0	\$0	\$70,000	\$0	\$0	4 )		2022-23 Total \$5,362,000
ISCVI VI	EAR 2023-24										
M M	2023-24	Manhole Rehabilitations	N/A						\$450,000	\$150,000	Replacement project/ I & I Improvement
M	2023-24	Pipeline Rehabilitations	N/A						\$450,000		Replacement project/ I & I Improvement
OP18		Max Rhoads Plant Settling Tank / Track Rehab	N/A						<b>\$100,000</b>		Rehab Metal Tracks, Chains, Sprockets, Gears, Axles on Tanks 1 & 2
OP29	2023-24	MRP Blower 1&2 Equipment Rehab (Moter/Gearbox)	N/A								Rehab Motors & Gearboxes for Aerators 1&2
OP30	2023-24	David Hawes Plant WWTP Process Control Automation	N/A								Process Control Automation & Instrumentation @ DHP
C14		Williamsburg Square Pump Station/Force Main Project	N/A						\$600,000	φυσυ,υυυ	Long term Control Plan
Opsub	2023-24	Plant Equipment Upgrades/Replacements	N/A	+					φουσ,σου	260 000	Includes forecasted existing plant/facility equipment replacements - See Coded Ops 5yr Plan
Opsub	2023-24	Collection System Facilities & Equipment Upgrades/Replacements	N/A	-					<del> </del>		Includes forecasted existing plant/lacility equipment replacements - See Coded Ops Syr Plant Includes forecasted collection sys, all pump repair/replacement, fleet and PS replacements
OPSUB			N/A N/A	+					<del> </del>		
C	2023-24 2023-24	Plant and Collection System Renovations/Replacements	N/A N/A						\$350,000	φ1,1/5,000	Various operation/replacement expenses CSO initiative
C	2023-24 2023-24	Environmental Improvement Initiative(s)  Total New Customers	0	Ś0	\$0	\$0	Ś0	\$0	. ,	\$2,525,000	2023-24 Total \$4,375,000
	2020-24	Total New Customers		ŞU	γU	γU	Ų	ĄU	71,030,000	72,323,000	2023 2-4 10101 9-4,373,000

\*\*Denotes currently under construction

# Denotes grant approved

SFR = Single Family Residential

Proposed to RWRA Board - January 28, 2019

M = Maintenance Project

OP = Operational Projects/Expenses

Planning Document Only - Schedule of projects subject to change based on several factors, including funding.